Customer No.: 31561
Docket No.: 10221-US-PA
Application No.: 10/604,127

REMARKS

Present Status of the Application

Claims 1-5 & 15-19 have been allowed. The Office Action rejected claim 6 under 35 U.S.C. 103(a), as being unpatentable over Corlett et al. (U.S. 6,379,538) in view of Yamasaki et al. (U.S. 6,177,005). Claims 7-14 are objected to as being dependent upon a rejected base claim. Claims 1-19 are pending in the present application, and reconsideration of claims 6-14 is respectfully requested.

Discussion of Office Action Rejections

The Office Action rejected claim 6 under 35 U.S.C. 103(a), as being unpatentable over Corlett et al. (U.S. 6,379,538) in view of Yamasaki et al. (U.S. 6,177,005). Applicants, however, respectfully submit that Corlett et al. and Yamasaki et al. are legally deficient to render claim 6 unpatentable. Applicants respectfully traverse the rejections for at least the reasons set forth below.

In the present invention, claim 6 recites:

6. A method for recovering drained water of a processing station, comprising the steps of:

draining water from the processing station;

measuring the conductivity of the drained water using a conductivity analyzer;

channeling the drained water to a recovery tank by controlling a three-way valve according to the measured conductivity;

channeling the drained water from the recovery tank into a buffer tank;

channeling the drained water from the buffer tank into an interim tank; and

analyzing the drained water inside the buffer tank using a total organic carbon analyzer and re-directing the drained water inside the interim tank into a first raw water tank or a second raw water tank.

(Emphasis Added)

Applicants submit that the claim patently defines over the prior art of record, for at least the reason that the prior arts fail to disclose at least the steps emphasized above.

Corlett et al. only discloses "When the solids detection apparatus indicates that the abrasive solids concentration is below a desired threshold, the entire effluent stream is diverted by a valve 26 via line 28 for reuse in non-critical rinsing applications in the polishing tool, or to an ion exchanger 30 for ion exchange treatment of the effluent stream prior to conducting the effluent stream via line 32 to the polishing tool for reuse, or in other process applications. When solids detection apparatus indicates that the abrasive solids concentration is above the desired threshold, the entire effluent stream, including the aqueous slurry containing abrasive particles and materials removed from planarization of semiconductor materials, is diverted via line 34 by the valve 26 to the industrial waste treatment system or drain 35 for disposal, or via line 36 to a concentrator apparatus 38 which further separates the clear liquid component from the abrasive

solids and concentrates the abrasive solids for disposal." (Col. 5, lines 45-62), but Corlett et al. do not teach or suggest that the water drained from the processing station should be channeled to a recovery tank by controlling a three-way valve **according to the measured conductivity**. In other words, the method of claim 6 in the present invention channels the drained water to a recovery tank by controlling a three-way valve according to the measured conductivity without detecting the concentration of solids in the drained water.

Moreover, Yamasaki et al. only discloses "the rate of discharge of an activated carbon tower circulation pump 180, the rate of blow of a blower 181 and the rotating speed of an underwater stirrer 182 are inverter-controlled on the basis of a control signal from a controller 179 based on a signal from a TOC meter 178 provided for the second water tank 174." (Col. 25, lines 46-52), but Yamasaki et al. do not teach or suggest that the drained water inside the buffer tank **should be analyzed using a total organic carbon analyzer to determine whether the drained water in the interim tank is channeled to a first raw water tank or a second raw water tank**.

Further, in Fig. 11 of Yamasaki et al., water inside the **second water tank** 234 is **analyzed** by the TOC meter 238, and water in the **second water tank** 234 is **discharged** to the primary pure water producing unit 235. However, in the method of claim 6 of the present invention, the drained water inside the **buffer tank** is **analyzed** by the total organic carbon analyzer, and the drained water inside the **interim tank** is **re-directed** into a first raw water tank or a second raw water tank. In other words, the TOC analysis and water discharge are processed

in the same tank (**second water tank**) in Yamasaki et al., but the drained water is TOC analyzed and re-directed in the different tanks (**buffer tank** and **interim tank**) in the method of claim 6 of the present invention.

For at least the foregoing reasons, Applicant respectfully submits that independent claim 6 should be patentable over Corlett et al. (U.S. 6,379,538) in view of Yamasaki et al. (U.S. 6,177,005), and should be allowed. For at least the same reasons, dependent claims 7-14 should be allowed as well.

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CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 1-19 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

Date: May 4, 2005

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